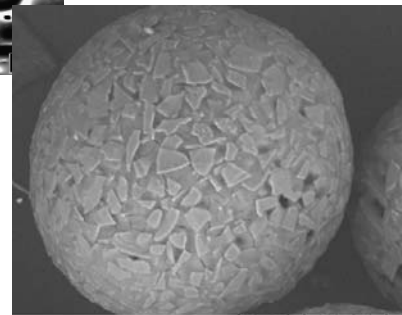
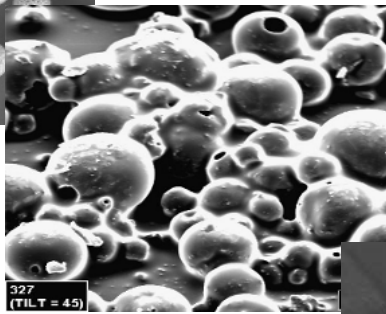
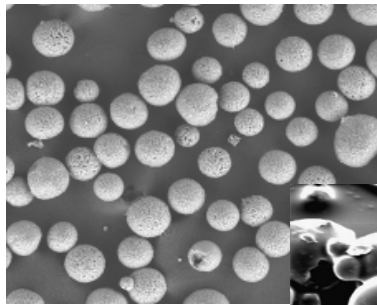


## ULTRA POLISHING FILM

경이적인 혁명 - 시편연마



x 1500 50um  
**Miracle sphere**

### Order Information

- [www.randb.co.kr](http://www.randb.co.kr)
- [webmaster@randb.co.kr](mailto:webmaster@randb.co.kr),
- T. 042-935-0490, F. 042-935-0496



**R&B Inc.**

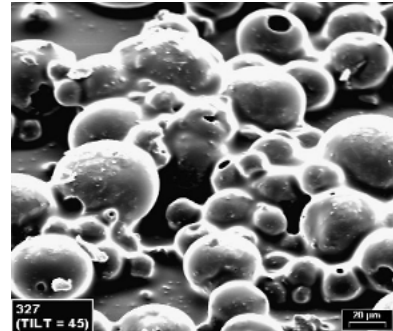
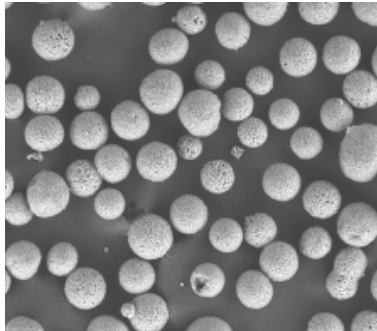
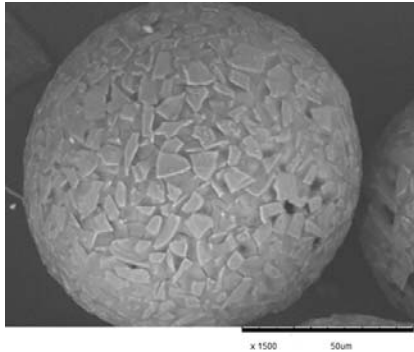
## Introduction

- 조직관찰 용 시편연마는 최소 5단계 Grinding과 2단계의 Polishing 과정이 필요
- 지난 반세기 동안 다양한 노력이 시도되었으나 아직도 고전적인 방법 사용
- **Ultra Polishing Film**: 시편연마의 기존관념을 완전히 바꾸는 경이적인 신제품  
220 Grid Grinding 후 1 $\mu$ m Polishing  
Grinding 과 Polishing 경계를 없앤 Processing

## Characteristics

### Ultra Polishing Film

- 원하는 크기와 분포를 정밀하게 조절된 1 $\mu$ m 및 3 $\mu$ m Diamond 연마재 사용
- Nano binder 를 이용하여 약 20~80 $\mu$ m 크기의 Aggregated sphere 로 제작
- 3 mil(75 $\mu$ m) Polyester film 에 Aggregated sphere Doping
- 효율적이고 반복성 있는 Polishing



Nano binder 를 이용한 Sphere

### UP Film 의 특징점

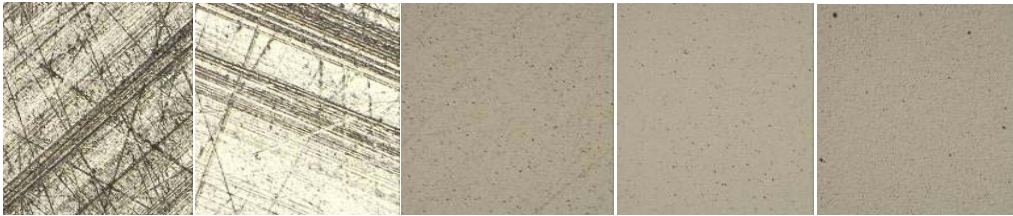
- 1~2 Step 전 공정 완료
- 작업시간 및 경비 절감 (20-30% 수준)
- High Flatness
- 연마재 불필요
- Lapping film에 비하여 3배 수명

## Application

Fiber Optics, Electronics, Magnetic Heads, Roll Finishing, Glass Polishing  
Lapidary/Gem Stone, Fine Lapping, Metallographic Applications Plastic, Metal

## Actual process

- 기존 Grinding/Polishing 방법과 UP Film 공정의 비교
  - Conventional Process (About 30minutes) 최소 5~7 Step 을 거쳐 1 $\mu$ m 연마표면 가능

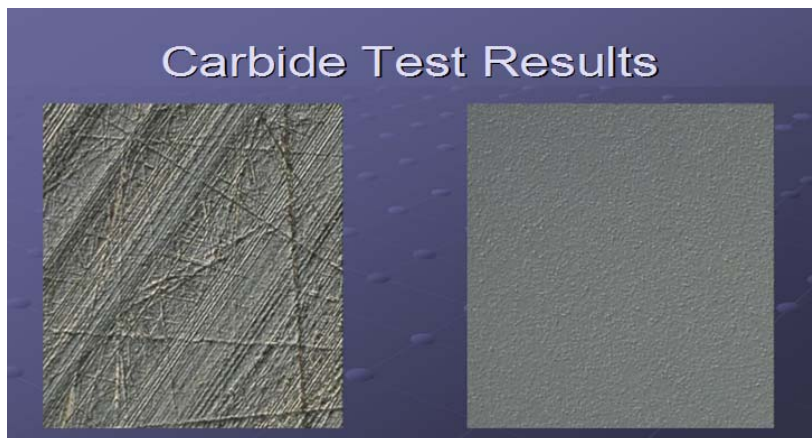


- UP Film Process

WC, Ceramic, Glass 등 매우 단단한 재료 – 220 Grinding 후 1 $\mu$ m UP Film

Polishing condition

- 500RPM
- 충분히 물 공급
- 500gf 전후 적절한 하중
- 약 2~3분



Before UP Film Polishing

After UP Film Polishing

Hardened steel HRC 50~60 등은 220 Grinding 후 3 $\mu$ m UP Film



## Supply and Stock Item

UP Film (Ultra Polishing Film)

Disc type: PSA back, MD back

Code No.	Description	Unit
*UPF -8A-010	8", 1um, Ultra Polishing film, PSA back	5 Sheet/pkg
*UPF -8A-030	8", 3um, Ultra Polishing film, PSA back	
*UPF -8D-010	8", 1um, Ultra Polishing film, Magnetic back	
*UPF -8D-030	8", 3um, Ultra Polishing film, Magnetic back	
*UPF-10A-010	10", 1um, Ultra Polishing film, PSA back	
*UPF-10A-030	10", 3um, Ultra Polishing film, PSA back	
*UPF-10D-010	10", 1um, Ultra Polishing film, Magnetic back	
*UPF-10D-030	10", 3um, Ultra Polishing film, Magnetic back	
*UPF-12A-010	12", 1um, Ultra Polishing film, PSA back	
*UPF-12A-030	12", 3um, Ultra Polishing film, PSA back	
*UPF-12D-010	12", 1um, Ultra Polishing film, Magnetic back	
*UPF-12D-030	12", 3um, Ultra Polishing film, Magnetic back	



### R&B Inc.

Head Office: Head Office: 65-1, Techno 8-ro, Daejeon Korea 305-500

Tel: 82-42-935-0490 Fax: 82-42-935-0496

E-mail: [webmaster@randb.co.kr](mailto:webmaster@randb.co.kr)

Home page: [www.randb.co.kr](http://www.randb.co.kr)

Shopping mall: [shop.randb.co.kr](http://shop.randb.co.kr)

RB 227 PRINTED 04/2013 COPY RIGHT, R&B Inc.